

Title (en)  
Oxygen sensor.

Title (de)  
Sauerstoffsensoren.

Title (fr)  
Capteur d'oxygène.

Publication  
**EP 0245717 A2 19871119 (EN)**

Application  
**EP 87106317 A 19870430**

Priority  
US 86273586 A 19860513

Abstract (en)  
An expendable immersion oxygen sensor for molten metal is provided with an improved oxygen reference electrode including Cr, Cr<sub>2</sub>O<sub>3</sub>, NiO, and Fe and the oxygen electrode and thermocouple are secured in the face of the sensor by resin-sand to reduce initial overshoot and failure due to thermal shock.

IPC 1-7  
**G01N 27/28**; G01N 27/30; G01N 27/46

IPC 8 full level  
**G01N 27/409** (2006.01); **G01N 27/28** (2006.01); **G01N 27/30** (2006.01); **G01N 27/411** (2006.01)

CPC (source: EP)  
**G01N 27/4117** (2013.01)

Cited by  
CN105548308A; EP0828156A3; EP2728352A1; US11506620B1; WO2004095015A1

Designated contracting state (EPC)  
DE GB IT

DOCDB simple family (publication)  
**EP 0245717 A2 19871119**; AU 7194087 A 19871119; CA 1252512 A 19890411; JP H0472183 B2 19921117; JP S62289757 A 19871216

DOCDB simple family (application)  
**EP 87106317 A 19870430**; AU 7194087 A 19870424; CA 535036 A 19870416; JP 11089787 A 19870508